

management activities are expected to control existing noxious weed populations. Hydrology supporting wetlands is likely to remain constant.

The No Action Alternative would not affect individuals or habitats of the Ute ladies'-tresses orchid, Colorado butterfly plant or Preble's. Existing conditions created by turbines, guy wires, and other site features and their effects on avian species and bats, would continue under the No Action Alternative.

The incremental impacts of more and larger turbines, taller towers and longer guy wires on avian species and bats would be avoided.

MITIGATION MEASURES

If Option 1 for the gas pipeline route is selected, the following measures are required to minimize potential impacts to the Preble's:

- A Biological Assessment (BA) as defined by the ESA will be prepared to fully evaluate potential effects from the pipeline and determine whether the construction will adversely affect Preble's;
- Initiate formal consultation with the USFWS to obtain a Biological Opinion and Incidental Take Statement if effects to Preble's are determined to be adverse;
- Determine conservation measures through consultation with the USFWS to minimize the possibility of adversely affecting Preble's and the possibility of incidental take occurring. Measures may include but not be limited to:
 - Minimize the pipeline corridor width through the riparian habitat to the trench cut and a minimal swath for equipment passage and overburden storage;
 - Conduct a three night trapping survey at the site of the proposed pipeline crossing immediately before any ground disturbance to capture and remove Preble's from the area; and
 - Maintain compliance with applicable permit stipulations regarding erosion control and impact minimization.

4.9 CULTURAL RESOURCES

Impacts to significant cultural resources can occur as a result of building or road construction, utility work, demolition, changes to a resource's setting, or use (including both noise and ground-disturbing activities). This section evaluates potential impacts to cultural resources within the NWTC. The likelihood of impacts is evaluated based on primary, secondary and cumulative impacts of the Proposed Action and No Action alternatives.

Section 106 of the National Historic Preservation Act of 1966 (as amended) requires agencies to consult with the State Historic Preservation Officer (SHPO) when making determinations of eligibility and effect for cultural resources within or adjacent to a project. Consultation letters between DOE and SHPO are included Appendix E.

4.9.1 Impacts from Facility and Infrastructure Improvements

No cultural resource impacts are anticipated for facility and infrastructure improvements. However, earthwork and trenching present a very limited potential to uncover, disturb or destroy resources that are not expected, but could be found in construction areas. Should any evidence of archaeological resources be discovered during construction at the NWTC, the impact would be mitigated by NREL's commitment to stopping the work in the vicinity until a qualified archaeologist can completely evaluate the significance of the find according to criteria established by the National Register.

Option 1 for the natural gas pipeline passes through the 6.5-acre area identified by Labat and Anderson (1995) as having potential for buried archaeological deposits. Based on the recommendations of the Labat and Anderson report, this area should be avoided. If avoidance is not possible, SHPO consultation and systematic testing of the impacted area is recommended prior to ground disturbance to determine if there are any buried archaeological deposits. The level of systematic testing would be determined by the nature of the resource and the potential for impact.

4.9.2 Impacts of the No Action Alternative

Under the No Action Alternative there would be no ground disturbing activities within the area identified by Labat and Anderson (1995) as sensitive for buried cultural resources. All other areas within the NWTC were previously cleared for cultural resources, so any disturbance associated with ongoing operations would be expected to be minor and would be addressed by standard protocol and NREL procedures.

MITIGATION MEASURES

The following measure, an existing NREL commitment, is recommended to address potential impacts of the Proposed Action:

- If natural gas pipeline Option 1 is selected, systematic archaeological testing will be implemented. The testing will occur prior to construction activities and will be approved, as necessary, by the SHPO.

4.10 HAZARDOUS MATERIALS AND WASTES

The Proposed Action is not expected to require new hazardous materials and would require only minor increases in hazardous materials use and waste generation. The NWTC's hazardous waste generator status is expected to remain the same. New facilities and activities are not expected to increase the potential for accident releases or spills. All existing programs, policies and practices associated with hazardous materials and waste would remain in place to apply to future improvements and activities associated with the Proposed Action.

4.10.1 Construction Impacts

Construction activities (tower foundation excavations, on-site utility infrastructure trenching, off-site gas line installation, earthwork, grading, etc.) present the potential to encounter previously